

6. A system according to any preceding claim further comprising one or more heat exchangers (5) to remove heat from the hydrogen released from the first (1) or second (2) hydrogen storage materials.
7. A system according to any preceding claim, wherein the first hydrogen storage material (1) comprises an AB_5 , AB_2 or an AB type material.
8. A system according to claim 7, wherein the first hydrogen storage material (1) is $LaNi_5$, Al doped $LaNi_5$, $CeNi_5$, Al doped $CeNi_5$, $CaNi_5$, Mn doped $CaNi_5$, $TiVMn$, Zr doped $TiCrMn$, Zr doped $TiCr_2$, Co doped TiV_2 , Fe/Ti, Ti/Zr, $Ti(MnV)$ and $Ti(MnCr)$, or any combination thereof.
9. A system according to any preceding claim, wherein the second hydrogen storage material (2) comprises Mg.
10. A system according to claim 9, wherein the second hydrogen storage material (2) comprises PGM.
11. A system according to claim 9 or 10, wherein the second hydrogen storage material (2) is MgH_2 or $Mg H_2/Ni$, or any combination thereof.
12. A system according to any preceding claim, wherein the hydrogen consumption system (3) comprises a fuel cell.
13. A system according to any of claims 1 to 11, wherein the hydrogen consumption system (3) comprises an internal combustion engine.
14. A vehicle, the vehicle comprising a system according to claim 12 or claim 13 as a power source.
15. A method of activating a second hydrogen storage material (2) for supplying a hydrogen consumption system (3), which method comprising utilising at least a

proportion of a stream of hydrogen generated by activating a separate first hydrogen storage material (1).